

REMARKS/ARGUMENTS

Claims 1-22, 26, 27, and 41-43 will be pending upon entry of the present amendment. Claims 4, 5 and 8 are amended, and claims 23-25 are cancelled. Claims 17 and 18 are withdrawn pending allowance of a generic claim.

Applicant thanks the Examiner for indicating the allowability of the subject matter of claims 16, 21, and 22.

Claims 1-15, 19, 20, 23-27, and 41-43 were rejected under 35 U.S.C. § 102(b) as being anticipated by each of Forster (U.S. Patent No. 4,252,508) and Thoma (Swiss patent No. 325,508), and claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over each of Forster and Thoma.

In the discussion that follows, where text from Forster is cited, column and line numbers will be indicated by two numbers separated by a colon, e.g., 4:17 to cite column 4, line 17.

Claim 1 recites, in part, “a first pump/motor ... and a second pump/motor” The Office Action points to Forster’s pumps 30, 31 as corresponding to the first and second pump/motors of claim 1. Applicant respectfully traverses this characterization of Forster. The term “pump/motor” is used in the art to refer to a hydraulic machine that can be operated as either a pump or a motor, while Forster’s machines are configured for operation as pumps only. Forster states, beginning at 2:16:

The housing 1 of the pump unit has a flange 2 which is adapted to be connected with a power source, such as an internal combustion engine (not shown). The power input shaft 5 is driven by the power source, and the power input shaft 5 drives two main pumps 30 and 31 and also three auxiliary pumps 18, 22 and 26 through an arrangement of bevel gears (to be discussed below).

It is clear from this text that Forster does not contemplate the use of the pumps 30, 31 as pump/motors, and that their configuration is not suited for such operation. Operation of the pumps as motors would not provide any benefit to a power source connected to the power input

shaft 5, and would probably damage it. Accordingly, Forster fails to anticipate each of the limitations of claim 1, which is therefore allowable thereover.

With regard to the Thoma reference, because this reference is not in English, Applicant is not able to confirm the Office Action's position that Thoma's machines correspond to the first and second pump/motors of claim 1. Citing these machines as such is mere speculation, and is therefore inadequate for the purpose of rejecting claim 1. With regard to reliance on foreign-language references, MPEP § 706.02 II states that "[i]f the document is in a language other than English and the examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection." Accordingly, if the Examiner elects to maintain the rejection of claim 1 on the same grounds, Applicant respectfully requests that an English language translation be provided so that Thoma's precise scope can be determined. Alternatively, Applicant respectfully requests withdrawal of the rejection of claim 1 over Thoma.

Claim 4 recites, "a first gap provided between the first drive plate assembly and a first annular bearing provided on the shaft, a spacer being provided in the first gap to just contact the first drive plate assembly and the first annular bearing, and further comprising a second gap provided between the second drive plate assembly and a second annular bearing provided on the shaft, a second spacer being provided in the second gap to just contact the second drive plate assembly and the second annular bearing." Forster fails to anticipate the limitations of claim 4. The Office Action points to Forster's plates 9, 10 and bearings 32, 33 as corresponding, respectively, to the first and second drive plates and first and second annular bearings of claim 1. The Office Action does not point to a feature of Forster as corresponding to the first and second gaps of claim 4, but points to Forster's bevel gears 6, 7 as corresponding to the first and second spacers of claim 4. Applicant respectfully disagrees with such a characterization. First, there is no gap shown in any of Forster's figures between either of the plates 9, 10 and the corresponding bearings 32, 33. To the extent discernible at the scale shown in the figures, there appears to be

hard contact between the plates and the bearings. Second, the bevel gears 6, 7 are positioned between the Forster's bearings, not between the bearings and the respective plates. While gear 7 does appear to contact both the plate 9 and the bearing 32, it does not occupy a gap between them. Meanwhile, gear 6, which is positioned approximately midway between the bearings 32 and 33, does not make contact with either plate 10 or bearing 33; such contact would damage or destroy the mechanism. Finally, one of ordinary skill in the art would not consider a bearing to be the equivalent of a spacer. Clearly, Forster fails to anticipate all the limitations of claim 4 as would be necessary for rejection under § 102.

With regard to Thoma, the Office Action points to Thoma's elements TF and RL of Figure 1 as corresponding, respectively, to the first and second drive plates and first and second annular bearings of claim 1, and points to apparent gaps between Thoma's elements TF and RL as corresponding to the gaps of claim 4. However, while the Office Action refers to a spacer in these gaps of Thoma's Figure 1, applicant is not able to confirm such. There is no detail, with regard to the simple feature shown, that would differentiate between a spacer, a portion of element TF, or a portion of the element (shaft?) TW. Furthermore, some elements of Thoma's drawings are shown as sectional views, while others (apparently) are not, which further confuses the discernible details. Thus, the feature pointed to may, for example, be a reduced-diameter portion of the element TF. Applicant notes, for example, that Forster's plate 10 includes several reductions in diameter along its length (*see Forster*, Figure 1), so it is perfectly reasonable, if the elements RL and TF are analogous, respectively, to Forster's bearings 32, 33 and plates 9, 10, that the plates TF may have a reduced-diameter portion that is visible between the bearings and the largest diameter portions of the plates, in which case there is neither a gap nor a spacer shown in the figures. Because the Thoma reference is not in English, Applicant is not able to determine whether this question is addressed in the text of the patent. If it is not, then Thoma fails to show the "identical invention ... in as complete detail as is contained in the claim" (*see* MPEP § 2131), and there are no grounds to infer any specific structure with regard to that aspect of the figures.

Applicant therefore respectfully requests that an English language translation be provided so that Thoma's precise scope can be determined. Given Applicant's current understanding of the Thoma reference, Applicant believes that claim 4 is allowable over Thoma and Forster on its own merits, apart from its allowability as depending from allowable claim 1.

With regard to claim 8, neither Forster nor Thoma anticipates "an actuator mechanism coupled to the first and second pump/motors and configured to control displacement changes of each of the first and second pump/motors such that the displacement of each of the first and second pump/motors remains substantially equal to each other." In rejecting claim 8, the Office Action points to Forster's pistons 11 and 13 as being "actuators that control displacement changes of each of the first and second pump/motors (30, 31) to balance pressure." Applicant respectfully disagrees. Pistons 11 and 13 are ones of respective pluralities of pistons that reside in cylinder blocks 12 and 14, and that rotate, with their respective cylinder blocks, around the axes of their respective middle pivots 104, 106 (*see Forster*, 2:28-35). As they rotate, each piston reciprocates within its cylinder block. This has no effect on controlling the displacement of the machines. Instead, Forster controls displacement of the pumps 30, 31 with adjusting devices 16 (*see Forster*, Figure 1 and 2:36-41). However, the mere teaching of adjusting devices is not sufficient to anticipate claim 8, which recites an actuator mechanism ... configured to control displacement changes of each of the first and second pump/motors such that the displacement of each of the first and second pump/motors *remains substantially equal to each other*." (Emphasis added.) Forster provides no teaching that the adjusting devices 16 control displacement of its pumps *to remain substantially equal*. On the contrary, Forster states that "[i]f it is desired, the displacement of the pumps 30 and 31 may be varied independently of each other so that one pump may have a larger displacement than the other." (*Forster*, 2:44-47.) Thus, far from anticipating each limitation of claim 8, Forster teaches away from at least this limitation.

In rejecting claim 8 over Thoma, the Office Action points to pistons K, which correspond substantially to Forster's pistons 11 and 13, and thus are also incorrectly cited, for the same reasons. In fact, it appears that the machines pictured in Thoma's Figures 1 and 2 are fixed-displacement machines, and thus would have no need of any mechanism to control displacement. With regard to Thoma's other embodiments, none show any mechanism for controlling displacement. Thoma is (apparently) directed to other aspects of the machines, and thus relies on previously known means for displacement control. Again, if the Examiner believes that Thoma does provide such a teaching, Applicant respectfully requests that an English language translation be provided to support that position. Clearly, as demonstrated by the quote from Forster, there is no inherent requirement to maintain equal displacement, and thus such a control mechanism cannot be inferred from the material adduced. Accordingly, on the basis of Applicant's current understanding, claim 8 is allowable over Forster and Thoma.

Claim 19 recites, in part, "a housing provided around the first and the second pump/motors, the first and the second bearings, and the torque transferring device; and a first seal positioned between the first bearing and a first drive plate of the first pump/motor and a second seal positioned between the second bearing and a second drive plate of the second pump/motor." Forster and Thoma each fail to anticipate this limitation. The Office Action points to Forster's cylindrical surfaces 35, 36 as anticipating the seals of claim 19. Applicant disagrees for two reasons: first, these surfaces are not seals, but are portions of flanges 17, 21 configured to receive pilot surfaces of auxiliary pumps 18, 22 (*see Forster*, 3:14-21), and, second, these surfaces are not positioned between Forster's bearings 32, 33 and the respective plates 9, 10, as would be necessary to anticipate the claim. Claim 19 is therefore allowable over Forster.

With regard to Thoma, the Office Action points to elements LA and LR as corresponding to the seals of claim 19. As with the other rejections over Thoma, Applicant cannot confirm the structure or purpose of the cited elements based on the figures alone. Additionally, it is not clear to the Applicant exactly what elements are referenced by the

designations LA and LR, given the quality of the copy available to the Applicant. The features that might be referenced could be bearings, sliding surfaces, seals, or some other kind of element. Accordingly, Applicant respectfully requests that the Examiner provide an English language translation or, alternatively, allow claim 19, which Applicant believes to be allowable over the prior art.

With regard to claim 20, which recites, in part, “wherein the first and the second seals divide the housing into a first, a second, and a third region,” Applicant notes that, even if one of the elements referenced by LA or LR is a seal, it cannot divide the housing of base claim 19 into first, second, and third regions, as recited in claim 20, because it is positioned in a separate casing that does not extend around all of the first and the second pump/motors, the first and the second bearings, and the torque transferring device as recited in claim 19. Accordingly, claim 20 is allowable on its own merits, apart from depending from an allowable base claim.

While claim 26 differs in scope from claim 4, a review of the arguments for the allowance of claim 4 may also be applied in support of the allowability of claim 26. In particular, neither Forster nor Thoma teach or suggest “positioning a first spacer in the first gap to just contact the first drive plate and the first bearing; and positioning a second spacer in the second gap to just contact the second drive plate and the second bearing,” as recited in claim 26.

Claim 27 recites, in part, “housing the first and the second pump/motors, the first and the second bearings, and the torque transferring device in a common housing; dividing the common housing into first, second, and third regions wherein the first and the third regions contain the first and second pump/motors, respectively, and the second region contains the torque transferring device, the first bearing, and the second bearing; filling the first and the third regions with sufficient oil to operate the pump/motors.” Forster and Thoma each fail to anticipate these limitations of claim 27. The Office Action indicates that the prior art would inherently and necessarily perform the claimed method. Applicant respectfully disagrees. None of the prior art teaches a common housing that encloses first and second pump/motors, first and second

bearings, and a torque transferring device, and in which the housing is divided into regions such that one of the regions contains the torque transferring device, the first bearing, and the second bearing, and in which the other two regions are filled with oil. With regard to the Forster reference, Applicant can find no seals or other suitable dividing elements, and there are certainly none that would place the bearings 32, 33 in a different region than the pumps 30, 31, inasmuch as such an element would need to be between the bearings 32, 33 and the plates 9, 10. With regard to Thoma's Figure 3, it appears that if there is a common housing, it is not clear where an element dividing the housing is located, nor does it appear that the ends of the housing that contain the motors are filled with oil. It is certainly not inherent that Thoma anticipates the limitations of claim 27. Accordingly, claim 27 is allowable over the prior art.

Overall, the cited references do not singly, or in any motivated combination, teach or suggest the claimed features of the embodiments recited in independent claims 1, 8, 19, 26, or 27, and thus such claims are allowable. Applicant's decision not to argue the allowability of each of the dependent claims is not to be construed as an admission that such claims would not be allowable but for their dependence on allowable base claims, and applicant reserve the right to present such arguments as may become necessary in the future. If the undersigned representative has overlooked a relevant teaching in any of the references, the Examiner is requested to point out specifically where such teaching may be found.

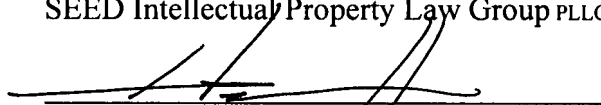
In light of the above amendments and remarks, Applicant respectfully submits that all pending claims are allowable, and therefore respectfully requests that the Examiner reconsider this application and timely allow all pending claims. Examiner Avery is encouraged to contact Mr. Bennett by telephone at (206) 694-4848 to discuss the above and any other distinctions between the claims and the applied references, if desired. If the Examiner notes any informalities in the claims, she is encouraged to contact Mr. Bennett by telephone to expeditiously correct such informalities.

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The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC

A handwritten signature in black ink, appearing to read "Harold H. Bennett II", is written over a horizontal line.

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